#### 1. Purpose

- 1.1 The purpose of these performance requirements is to establish standard criteria of performance with which USPS requires NCOA<sup>Link</sup> End User Licensees to comply. The NCOA<sup>Link</sup> Product will enable Licensees to have access to the following address list services:
  - New address when a name and old address match the change of address file
  - Detection of undeliverable addresses due to change of address
- 1.2 Licensee's matching software must adhere to specific USPS requirements regarding processing as well as to the matching rules and specifications herein. Licensees must utilize Coding Accuracy Support System (CASS) certified software for ZIP+4 processing. In addition, Licensee's NCOA<sup>Link</sup> system will be tested on a periodic basis.

#### 2. Product Description and Fulfillment

- 2.1 The NCOA<sup>Link</sup> Product utilizes what is referred to as "hash" tables. The hash tables are secure datasets that will only provide new address information when queried, through use of a software interface, with a specific algorithm of the name and old address from a mailer's address list which matches the algorithm of the information as it appears on a Change of Address form (PS 3575).
- 2.2 The input algorithm uses a complete name, a 9-digit ZIP+4 Code and a parsed address to obtain a match to a COA. The NCOA<sup>Link</sup> Product cannot assign a ZIP+4 nor will it respond to a non-ZIP+4 coded address.
- 2.3 Licensee is responsible for obtaining all necessary software. A software interface, which must be written or purchased, will customize the type of input format, provide the desired output, and contain appropriate links with ZIP+4 matching software.
- 2.4 Monthly updates containing the 18-month NCOA<sup>Link</sup> Product datasets will be provided via DVD to Licensees. Licensees must utilize the current CASS ZIP+4 product with the NCOA<sup>Link</sup> Product updates to provide the up-to-date address. Refer to Exhibit A for acceptable use dates of the ZIP+4 product.
- 2.5 Multiple address hygiene processes may be used by End User Licensees:
  - 2.5.1 Additional processes, such as ZIP+4, Delivery Point Validation (DPV) and LACS<sup>Link</sup>, can be run either independently or interactively with NCOA<sup>Link</sup> processing. The software required for these processes may be bundled as

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- a single integrated software package or provided separately for each individual process. In addition, each product may have separate licensing requirements including fees.
- 2.5.2 Prior to NCOA<sup>Link</sup> processing, input addresses presented to NCOA<sup>Link</sup> must be processed through CASS certified matching software to obtain ZIP+4 coded, parsed addresses. The ZIP+4 coded, parsed result and the corresponding name will be used to query NCOA<sup>Link</sup>. ZIP+4 results must be obtained within the valid window for processing based on the date NCOA<sup>Link</sup> processing is performed and the chart of valid ZIP+4 dates provided in Exhibit A.

#### 3. General Requirements

- 3.1 Any Licensee wishing to use the NCOA<sup>Link</sup> Product must first obtain (either by purchase or developer license) a licensed and certified Interface Product. The Interface must be reviewed, tested, and approved for use at Licensee's site(s) by USPS prior to any actual NCOA<sup>Link</sup> processing occurring in a production environment to ensure that all license requirements are met. After review and testing, USPS will provide Licensee with written approval (in the form of a License Agreement) of their use of the certified NCOA<sup>Link</sup> system.
- 3.2 Licensee, in order to utilize the NCOA<sup>Link</sup> Product, must meet all requirements and specifications contained within the License Agreement and the most current version of the Licensee Performance Requirements, unless explicitly allowed, prohibited, or modified by USPS in writing. Copies of these documents, the Certification Procedures and any new updates to the documents will be posted on the RIBBS website at http://ribbs.usps.gov/files/NCOALink.

#### 4. Specific Requirements

- 4.1 Licensees must use USPS Certified NCOA<sup>Link</sup> software to access the NCOA<sup>Link</sup> Product.
- 4.2 Licensees must use USPS CASS certified Address Matching software parsed, standardized output to query the NCOA<sup>Link</sup> Product.
- 4.3 Licensees must adhere to the provisions of Standards of Performance as detailed in Section 7.
- 4.4 Licensees must provide all specific reports as required in Section 8.

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- 4.5 Licensee will be assigned a unique four-character Customer ID for use on reports.
- 4.6 Licensees must be capable of:
  - a) Updating the system with full file replacement monthly via DVD.
  - b) Updating ZIP+4 and City State Products monthly.
  - c) Obtaining Delivery Point Code Information for all input addresses that are ZIP+4 coded via ZIP+4 process and all new addresses returned as a result of a match to NCOA<sup>Link</sup>.
  - d) Choosing appropriate processing options on basis of file content and process frequency.
  - e) Licensee shall provide USPS with access to any resource used in performance
    of this license and with the necessary equipment and/or reports to monitor
    performance at Licensee's facility.

### 5. Basic NCOA<sup>Link</sup> Product Output

- 5.1 Standardized return codes have been established to provide consistency of products and facilitate USPS evaluation of customer data.
- 5.2 For each address submitted to the NCOA<sup>Link</sup> process, Licensee's software must be able to return the following output:
  - a) Each original unaltered input name and address as it was presented
  - b) The standardized address appended with the correct ZIP+4/DPC, other postal values and any other intelligence flags or footnotes that result from the CASS processing segment.
  - c) For each mailing address for which there is a match to the NCOA<sup>Link</sup> Product, a standardized new address with 11-digit Delivery Point Barcode (DPBC) and standard return codes as listed in Exhibit B.
  - d) When a match is made, the following elements must be returned: the move effective date, specific name and address utilized in the query that obtained the match, and the move type. The move type is determined by the Interface based on the specific name inquiry utilized to obtain the match.
  - e) For each mailing address for which there is not a match to the NCOA<sup>Link</sup>

    Product, the Interface shall return all elements as appropriate under a and b as well as any standard return codes as may be appropriate as listed in Exhibit B.
  - f) The urbanization name information, when applicable.
  - g) The carrier route information for new (updated) addresses.

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h) Processing summary report containing information to identify the specific list and the statistics resulting from the NCOA<sup>Link</sup> process performed on the list.

#### 6. Quality Standards and Testing Criteria

- 6.1 The NCOA<sup>Link</sup> Product will be subject to periodic audit and evaluation of the organization's NCOA<sup>Link</sup> process and its adherence to the conditions of the NCOA<sup>Link</sup> License Agreement. Please note that the USPS audit file must be processed through the same NCOA<sup>Link</sup> system utilized for Mailing List processing.
- 6.2 The NCOA<sup>Link</sup> software will provide the necessary output as described in Section 5 utilizing the specific USPS format as described in Exhibit C. Upon notification of the transmission of an audit file, it can be retrieved from Licensee's specific USPS account via the internet. Licensee's output file and supporting documentation derived from the NCOA<sup>Link</sup> process will be posted to the same account.
- 6.3 The audit file will test Licensee's NCOA<sup>Link</sup> software with a series of known forwardable addresses and known non-forwardable addresses to validate Licensee's ability to query the NCOA<sup>Link</sup> Product and return the appropriate output responses.
- 6.4 The audit will also verify the administrative output of the process.
- 6.5 Auditing will be performed once annually or as specified by USPS. If necessary, subsequent audits due to failures must be completed within the annual license period to prevent suspension and/or termination.
- 6.6 Upon validation of the results, Licensee will receive official audit results from USPS.
- 6.7 The system shall provide accurately matched responses for at least 99% of the inquiries where data to support these responses are known to be in the USPS file and shall produce no unexpected matches.
  - a) The percentage of audit file input name and address records that achieve the correct result shall not be less than 99% when compared to USPS expected results.
  - b) The audit file output shall not result in a match that is not expected and would result in returning incorrect information that would eventually cause the misdirection of mail.
  - c) The audit file output must correctly provide all NCOA<sup>Link</sup> elements with 100% accuracy.

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- 6.8 In the event that a problem is identified by USPS that is related to the NCOA<sup>Link</sup> process, USPS will, at its sole discretion, direct correction of the problem and/or exercise the suspension or termination provisions of the License, as it deems appropriate by the situation.
  - 6.8.1 When directed to correct deficiencies, Licensee will be given 30 days from the date of the notification in which to remedy the deficiencies and retest.
  - 6.8.2 If Licensee fails to remedy the deficiencies within 30 days, a suspension notice will be issued. The suspension notice will direct Licensee to cease all NCOA<sup>Link</sup> activities during the term of suspension and remedy all deficiencies within 60 days to regain good standing. USPS will also discontinue data fulfillment during the term of suspension.
  - 6.8.3 At the end of the term of suspension, the License Agreement between Licensee and USPS will be terminated if Licensee has not successfully remedied all deficiencies.
  - 6.8.4 Any Licensee whose license is terminated, voluntarily or involuntarily, will be ineligible to obtain another NCOA<sup>Link</sup> License Agreement for a period of five (5) years. In the event of an elective termination, USPS may refund the unused portion of the license fee by request from Licensee within thirty (30) days of the effective date of the termination.

#### 7. Standards of Performance

- 7.1 Licensee must maintain a service log, which will be maintained and be made available for Postal Service review for a period of 5 years. This service log shall also be kept on a computer file and shall be submitted to USPS electronically or on approved electronic media on a monthly basis (see Exhibit D for format).
- 7.2 Licensee shall repair or have repaired all equipment, hardware and/or software deficiencies related to the NCOA<sup>Link</sup> system within 30 days of identification of said deficiencies.
- 7.3 It shall be Licensee's responsibility to ensure that its employees understand the NCOA<sup>Link</sup> process and output.

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#### 8. Reports

- 8.1 Licensee shall produce a monthly performance report from the service log by site and/or system platform. The reports begin on the first day of the month and terminate on the last day of the month. The log must contain a record for each Mailing List processed through the NCOA<sup>Link</sup> system and the resultant statistics. The reports will be maintained and made available for Postal Service review for a period of five (5) years at Licensee's facility. The reports shall be submitted via electronic transmission within seven (7) calendar days of the end of the month to the National Customer Support Center, Memphis TN. The electronic report file layout is provided as Exhibit D.
- 8.2 The monthly performance reports will be named using a four-part eight-character identification scheme. The first character will be "C" to identify it as a Customer Service Log. Characters 2-5 will contain Licensee's USPS-assigned four-character platform identification code. The sixth character will identify the month of the report as indicated in the chart below. The last two characters will identify the year of the report by the last two digits of the calendar year.

Month	Code
January	1
February	2
March	3
April	4
May	5
June	6
July	7
August	8
September	9
October	Α
November	В
December	С

8.3 NCOA<sup>Link</sup> is intended solely for use as a Mailing List update tool. Testing of any kind using NCOA<sup>Link</sup> is generally discouraged by USPS. However, USPS does acknowledge that certain testing is necessary. In an effort to obtain an accurate statistical reporting regarding addresses updated by NCOA<sup>Link</sup>, the type of processing must be accurately and consistently recorded. Therefore, the following list of codes must be used to populate the "PROCESSING CATEGORY" field in the service log:

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Code	Description	Disposition of Results
EMP TRAIN	File processed as part of	Results discarded; no update
	employee training.	performed or information released.
INT DB TST	Testing involving proprietary	No updates performed; results
	Licensee database.	discarded after analysis.
NORMAL	Process mailing list for	COA information obtained and
	update prior to mailing.	updates performed.
STAGE I	Test of matching	Results used for internal program
	performance against USPS	analysis and subsequently
	self-test file.	discarded.
STAGE II	Test of matching	Output transmitted to USPS for
	performance scored by	evaluation and discarded when
	USPS.	test results finalized.
SYS TEST	File processed as part of	Results discarded; no updates
	system testing such as	performed or information released.
	loading of USPS file	
	updates.	

- 8.5 Upon request, the Interface must be capable of producing a hardcopy report summarizing the processing of each list. The report may contain any and all information gathered to fulfill the requirements of Section 8.1. At a minimum, the processing summary must contain:
  - Licensee Company Name
  - Licensee ID
  - File/List/Database Name
  - Processing Category
  - Matching Logic Applied flag
  - Class of Mail
  - Date NCOA<sup>Link</sup> Processing Completed
  - Total Number of Records Processed
  - Total Number of Records Matched

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## Exhibit A ZIP+4 Product Use Dates

Per the Domestic Mail Manual (DMM), the ZIP+4 and City/State data must be updated within 45 days of the release date. Per the NCOA<sup>Link</sup> License Agreement, Licensees are required to update these files on a monthly basis. The following chart is provided to assist in determining which data release is current.

Release	Required Use Date	Last Use Date
January 15	March 1	March 31
February 15	April 1	April 30
March 15	May 1	May 31
April 15	June 1	June 30
May 15	July 1	July 31
June 15	August 1	August 31
July 15	September 1	September 30
August 15	October 1	October 31
September 15	November 1	November 30
October 15	December 1	December 31
November 15	January 1	January 31
December 15	February 1	February 28 (Feb 29 in leap
		year)

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## Exhibit B NCOA<sup>Link</sup> Return Code Descriptions

Code = Return Code

Description = Explanation of Return code

Address = "Y" = New Address provided

How = "D" = Derived by data - returned in lieu of 11 digit

"N" = New Address not provided "S" = Derived by software

Code	Description	Address	How
Α	COA Match - The input record matched to a business, individual or family type	Υ	D
	master file record. A new address could be furnished.		
00	No Match - The input record COULD NOT BE matched to a master file record. A	N	D
	new address could not be furnished.		
01	Found COA: Foreign Move – The input record matched to a business, individual	N	D
	or family type master file record but the new address was outside USPS delivery		
	area.		
02	Found COA: Moved Left No Address (MLNA) – The input record matched to a	N	D
	business, individual or family type master file record and the new address was not		
	provided to USPS.		
03	Found COA: Box Closed No Order (BCNO) – The Input record matched to a	N	D
	business, individual or family type master file record which contains an old address		
0.4	of PO BOX that has been closed without a forwarding address provided.		_
04	Cannot match COA: Street Address with Secondary – In the STANDARD mode	N	D
	utilizing Family matching logic the input record matched to a family record type on		
	the master file with an old address that contained secondary information which		
	obtained a ZIP+4 street level match. The input record does not contain secondary information. This address match situation requires individual name matching logic to		
	obtain a match and individual names do not match.		
05	Found COA: New 11-digit DPBC is Ambiguous – The input record matched to a	N	D
	business, individual or family type master file record. The new address on the	'	
	master file record could not be converted to a deliverable address because the		
	DPBC represents more than one delivery point.		
06	Cannot Match COA: Conflicting Directions: Middle Name Related -There is	N	D
	more than one COA (individual or family type) record for the match algorithm and		
	the middle names or initials on the COAs are different. Therefore, a single match		
	result could not be determined.		
07	Cannot Match COA: Conflicting Directions: Gender Related -There is more	N	D
	than one COA (individual or family type) record for the match algorithm and the		
	genders of the names on the COAs are different. Therefore, a single match result		
	could not be determined.		_
80	Cannot Match COA: Other Conflicting Instructions – The input record matched	N	D
	to two master file (business, individual or family type) records. The two records in the master file were compared and due to differences in the new addresses, a		
	match could not be made.		
09	Cannot Match COA: High-rise Default – The input record matched to a family	N	D
	record on the master file from a High-rise address ZIP+4 coded to the building	' '	-
	default. This address match situation requires individual name matching logic to		
	obtain a match and individual names do not match.		
10	Cannot Match COA: Rural Default – The input record matched to a family record	N	D
	on the master file from a Rural Route or Highway Contract Route address ZIP+4		
	coded to the route default. This address situation requires individual name matching		1
	logic to obtain a match and individual names do not match.		<u> </u>
11	Cannot Match COA: Individual Match: Insufficient COA Name for Match –	N	D
	There is a master file (individual or family type) record with the same surname and		1
	address but there is insufficient name information on the master file record to		1
	produce a match using individual matching logic.		İ

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Exhibit B – NCOA<sup>Link</sup> Return Code Descriptions – continued

Code	Description	Address	How
12	Cannot Match COA: Middle Name Test Failed – The input record matched to an individual or family record on the master file with the same address and surname. However, a match cannot be made because the input name contains a conflict with	N	S
40	the middle name or initials on the master file record.	<b>.</b>	
13	<b>Cannot Match COA: Gender Test Failed</b> – The input record matched to a master file (individual or family type) record. A match cannot be made because the gender of the name on the input record conflicts with the gender of the name on the master file record.	N	S
14	Found COA: New Address Would Not Convert at Run Time – The input record matched to a master file (business, individual or family type) record. The new address could not be converted to a deliverable address.	N	S
15	Cannot Match COA: Individual Name Insufficient – There is a master file record with the same address and surname. A match cannot be made because the input record does not contain a first name or contains initials only.	N	S
16	Cannot Match COA: Secondary Number Discrepancy – The input record matched to a street level individual or family type record. However, a match is prohibited based on 1 of the following reasons: 1) There is conflicting secondary information on the input and master file record; 2) the input record contained secondary information and matched to a family record that does not contain secondary information. In item 2, this address match situation requires individual name matching logic to obtain a COA match and individual names do not match.	N	S
17	<b>Cannot Match COA: Other Insufficient Name</b> – The input record matched to an individual or family master file record. The input name is different or not sufficient enough to produce a match.	N	S
18	Cannot Match COA: General Delivery – The input record matched to a family record on the master file from a General Delivery address. This address situation requires individual name matching logic to obtain a match and individual names do not match.	N	D
19	Found COA: New Address not ZIP+4 coded – There is a change of address on file but the new address cannot be ZIP+4 coded and therefore there is no 11-digit DPBC to store or return.	N	D
20	Cannot Match COA: Conflicting Directions after re-chaining – Multiple master file records were potential matches for the input record. The master file records contained different new addresses and a single match result could not be determined.	N	D
66	<b>Daily Delete</b> – The input record matched to a business, individual or family type master file record with an old address that is present in the daily delete file. The presence of an address in the daily delete file means that a COA with this address is pending deletion from the master file and that <u>no</u> mail may be forwarded from this address.	N	S
91	COA Match: Secondary Number dropped from COA – The input record matched to a master file record. The master file record had a secondary number and the input address did not. The record is a ZIP+4 street level match.	Y	S
92	COA Match: Secondary Number Dropped from input address – The input record matched to a master file record, but the input address had a secondary number and the master file record did not. The record is a ZIP+4 street level match.	Y	S

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## Exhibit B - NCOA<sup>Link</sup> Return Code Descriptions - continued

Other Return Code Descriptions

Code	Description	Process
AA	Input Address ZIP+4 match	ZIP+4
A1	Input Address ZIP+4 not matched	ZIP+4
M1	Input Address Primary Number Missing	ZIP+4
M3	Input Address Primary Number Invalid	ZIP+4
P1	Input Address Missing PO, RR, or HC Box number	ZIP+4
P3	Input Address PO, RR, or HC Box number invalid	ZIP+4
BB	Input Address DPV matched (all components)	DPV
RR	Input Address DPV matched to CMRA	DPV
CC	Input Address DPV Primary Number match, Secondary Number not Matched (secondary number present but is not DPV confirmed)	DPV
N1	Input Address DPV Primary Number match, High-rise Address Missing Secondary Number	DPV
R1	Input Address DPV matched to CMRA but PMB Number not Present	DPV

<sup>\*</sup>Note: These codes are all generated during the DPV process. The Process indicator of "ZIP+4" or "DPV" denotes from which portion of DPV processing the return codes was generated.

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# Exhibit C Audit/Test File Layouts

		TEST CLIENT INPUT FILE HEADER RECORD		
RECORD FROM	POSITION TO	FIELD NAME	LENGTH	COBOL
1	8	NCSC AUDIT FILE CREATED DATE(YYYYMMDD)	8	9(08)
9	14	NCSC AUDIT FILE CREATED TIME(HHMMSS)	6	9(06)
15	18	NCSC AUDIT FILE NUMBER	4	9(04)
19	26	NCSC NCOA <sup>Link</sup> RELEASE DATE	8	9(08)
27	34	NCSC ZIP+4 RELEASE DATE	8	9(08)
35	42	NCSC DPV RELEASE DATE	8	9(08)
43	43	NCSC TYPE (Audit, Certification, Stage)	1	X(01)
44	297	FILLER	254	X(254)
298	298	RECORD TYPE (Header/Detail) (H,D)	1	X(01)
299	300	CARRIAGE RETURN LINE FEED	2	X(02)

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		TEST CLIENT INPUT FILE		
		DETAIL RECORD		
RECORD	POSITION			
FROM	ТО	FIELD NAME	LENGTH	COBOL
1	28	INPUT CUSTOMER KEY	28	X(28)
29	29	INPUT NAME PARSED (Y,N)	1	X(01)
30	95	INPUT CUSTOMER NAME	66	X(66)
	NOTE:	The information found in the INPUT CUSTOMER NAME will be fixed		, ,
		length. The data contained within the field may be presented as a single		
		field or it may be parsed. If the name is a business, then the name will		
		start in the first position.		
30	35	INPUT PREFIX TITLES	6	X(06)
36	50	INPUT CUSTOMER FIRST NAME	15	X(15)
51	65	INPUT CUSTOMER MIDDLE NAME	15	X(15)
66	85	INPUT CUSTOMER LAST NAME	20	X(20)
86	91	INPUT SUFFIX TITLES	6	X(06)
92	95	FILLER	4	X(04)
96	96	INPUT ADDRESS PARSED (Y,N)	1	X(01)
97	124	INPUT CUSTOMER URBANIZATION NAME	28	X(28)
125	191	INPUT CUSTOMER ADDRESS	67	X(67)
120	NOTE:	The information found in the INPUT CUSTOMER ADDRESS will be fixed	01	7(01)
	11012.	length. The data contained within the field may be presented as a single		
		field or it may be parsed.		
125	134	INPUT PARSED PRIMARY NUMBER	10	X(10)
135	136	INPUT PARSED PRE-DIRECTIONAL	2	X(02)
137	164	INPUT PARSED PRIMARY NAME	28	X(28)
165	168	INPUT PARSED SUFFIX	4	X(04)
169	170	INPUT PARSED POST-DIRECTIONAL	2	X(02)
171	174	INPUT PARSED UNIT DESIGNATOR	4	X(04)
175	182	INPUT PARSED SECONDARY NUMBER	8	X(08)
183	191	FILLER	9	X(09)
100	100	INDUIT LACT LINE DADCED (VAI)	4	V(04)
192	192 234	INPUT LAST LINE PARSED (Y,N) CUSTOMER LAST LINE	42	X(01)
193	NOTE:	The information found in the INPUT CUSTOMER LAST LINE will be fixed	42	X(42)
	NOTE.	length. The data contained within the field may be presented as a single		
		field or it may be parsed.		
193	220	INPUT CITY NAME	28	X(28)
221	222	INPUT STATE	20	X(02)
223	227	INPUT FIVE DIGIT ZIP	5	X(02) X(05)
228	231	INPUT ZIP+4 ADDON	4	X(04)
232	234	FILLER	3	X(04) X(03)
202	201	11661		71(00)
235	297	FILLER	63	X(63)
298	298	RECORD TYPE (Header/Detail) (H,D)	1	X(01)
299	300	CARRIAGE RETURN LINE FEED	2	X(02)

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		TEST CLIENT OUTPUT FILE HEADER RECORD		
RECORD	POSITION			
FROM	ТО	FIELD NAME	LENGTH	COBOL
1	8	NCSC AUDIT FILE CREATED DATE(YYYYMMDD)	8	9(08)
9	14	NCSC AUDIT FILE CREATED TIME(HHMMSS)	6	9(06)
15	18	NCSC AUDIT FILE NUMBER	4	9(04)
19	26	NCSC NCOA <sup>Link</sup> RELEASE DATE	8	9(08)
27	34	NCSC ZIP+4 RELEASE DATE	8	9(08)
35	42	NCSC DPV RELEASE DATE	8	9(08)
43	43	NCSC TYPE (Audit, Certification, Stage)	1	X(01)
44	298	FILLER	255	X(255)
299	306	OUTPUT AUDIT FILE CREATED DATE(YYYYMMDD)	8	9(08)
307	312	OUTPUT AUDIT FILE CREATED TIME(HHMMSS)	6	9(06)
313	320	PROCESSED AGAINST NCOALINK RELEASE DATE	8	9(08)
321	328	PROCESSED AGAINST ZIP+4 RELEASE DATE	8	9(08)
329	336	PROCESSED AGAINST DPV RELEASE DATE	8	9(08)
337	340	PROCESSED ON PLATFORM ID	4	X(04)
341	997	FILLER	657	X(657)
998	998	RECORD TYPE (Header/Detail) (H,D)	1	X(01)
999	1000	CARRIAGE RETURN LINE FEED	2	X(02)

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		TEST CLIENT OUTPUT FILE DETAIL RECORD (Page 1 of 2)		
RECORD	POSITION	DETAIL NECOND (Fage 1 of 2)		
FROM	TO	FIELD NAME	LENGTH	СОВО
1	28	INPUT CUSTOMER KEY	28	X(28)
29	29	INPUT NAME PARSED (Y,N)	1	X(01)
30	95	INPUT CUSTOMER NAMÉ	66	X(66)
	NOTE:	The information found in the INPUT CUSTOMER NAME will be fixed		` '
		length. The data contained within the field may be presented as a single		
		field or it may be parsed. If the name is a business, then the name will		
		start in the first position.		
30	35	INPUT PREFIX TITLES	6	X(06)
36	50	INPUT CUSTOMER FIRST NAME	15	X(15
51	65	INPUT CUSTOMER MIDDLE NAME	15	X(15
66	85	INPUT CUSTOMER LAST NAME	20	X(20
86	91	INPUT SUFFIX TITLES	6	X(06
92	95	FILLER	4	X(04
96	96	INPUT ADDRESS PARSED (Y,N)	1	X(01
97	124	INPUT CUSTOMER URBANIZATION NAME	28	X(28
125	191	INPUT CUSTOMER ADDRESS	67	X(67
	NOTE:	The information found in the INPUT CUSTOMER ADDRESS will be fixed		
		length. The data contained within the field may be presented as a single		
		field or it may be parsed.		244.5
125	134	INPUT PARSED PRIMARY NUMBER	10	X(10
135	136	INPUT PARSED PRE-DIRECTIONAL	2	X(02
137	164	INPUT PARSED PRIMARY NAME	28	X(28
165	168	INPUT PARSED SUFFIX	4	X(04
169	170	INPUT PARSED POST-DIRECTIONAL	2	X(02
171	174	INPUT PARSED UNIT DESIGNATOR	4	X(04
175	182	INPUT PARSED SECONDARY NUMBER	8	X(08
183	191	FILLER	9	X(09
192	192	INPUT LAST LINE PARSED (Y,N)	1	X(01
193	234	CUSTOMER LAST LINE	42	X(42
190	NOTE:	The information found in the INPUT CUSTOMER LAST LINE will be fixed	72	7(72
	INOTE.	length. The data contained within the field may be presented as a single		
		field or it may be parsed.		
193	220	INPUT CITY NAME	28	X(28
221	222	INPUT STATE	2	X(02
223	227	INPUT FIVE DIGIT ZIP	5	X(05
228	231	INPUT ZIP+4 ADDON	4	X(04
232	234	FILLER	3	X(03
				1 1(00
235	298	FILLER	64	X(64
	NOTE:	The following fields reflect the results of input name after the utilization of		
		a name parser. This is the final parsed name information utilized in the		
		process which was responsible for the final result. If the name is a business, then the name will start in the first position. If no match (return		
		code 00) then this field will be blank.		
299	304	QUERY PREFIX TITLE	6	YIOS
305	319	QUERY PREFIX TITLE QUERY CUSTOMER FIRST NAME	15	X(06 X(15
320	334	QUERY CUSTOMER FIRST NAME  QUERY CUSTOMER MIDDLE NAME	15	X(15
335	354	QUERY CUSTOMER MIDDLE NAME  QUERY CUSTOMER LAST NAME	20	X(15 X(20
		QUERY SUFFIX TITLE	6	
355	360	QUENT OUTFIX TITLE	О	X(06

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NOTE:   The following fields reflect the results of the input address after the utilization of a cortified CASS IPH 4 system. This is the final address information that was utilized in the process which was responsible for the final result.			TEST CLIENT OUTPUT FILE		
NOTE:			DETAIL RECORD (Page 2 of 2)		
NOTE:   The following fields reflect the results of the input address after the utilization of a cortified CASS IPH 4 system. This is the final address information that was utilized in the process which was responsible for the final result.	RECORD	POSITION			
Utilization of a certified CASS ZIP+4 system. This is the final address information that was utilized in the process which was responsible for the final result.	FROM			LENGTH	COBOL
Information that was utilized in the process which was responsible for the final result.		NOTE:			
Section   Sect					
361   388			information that was utilized in the process which was responsible for the		
389   398   QUERY PARSED PRIMARY NUMBER   10					
399	361	388	QUERY PARSED URBANIZATION NAME	28	X(28)
401	389	398	QUERY PARSED PRIMARY NUMBER	10	X(10)
401	399	400	QUERY PARSED PRE-DIRECTIONAL	2	X(02)
429         432         QUERY PARSED SUFFIX         4         X(04)           433         434         QUERY PARSED POST-DIRECTIONAL         2         X(02)           435         438         QUERY PARSED UNIT DESIGNATOR         4         X(04)           439         446         QUERY PARSED SECONDARY NUMBER         08         X(08)           447         474         QUERY PARSED CITY NAME         28         X(28)           475         476         QUERY PARSED STATE         2         X(02)           477         481         QUERY FIVE DIGIT ZIP         5         X(05)           482         485         QUERY FIVE DIGIT ZIP         5         X(02)           486         513         RESULT PARSED URBANIZATION NAME         28         X(28)           514         523         RESULT PARSED PREMARY NUMBER         10         X(10)           524         525         RESULT PARSED SUFFIX         4         X(04)           554         557         RESULT PARSED DIVIT DESIGNATOR         2         X(02)           556         553         RESULT PARSED CITY NAME         28         X(28)           558         559         RESULT PARSED SEONDARY NUMBER         08         X(02) <td>401</td> <td>428</td> <td>QUERY PARSED PRIMARY NAME</td> <td>28</td> <td></td>	401	428	QUERY PARSED PRIMARY NAME	28	
433         434         QUERY PARSED DIRECTIONAL         2         X/02/1           435         438         QUERY PARSED LINIT DESIGNATOR         4         X(04)           4339         446         QUERY PARSED SECONDARY NUMBER         08         X(08)           447         474         QUERY PARSED CITY NAME         28         X(28)           475         476         QUERY PIVE DIGIT ZIP         5         X(05)           482         485         QUERY ZIP+4 ADDON         4         X(04)           486         513         RESULT PARSED DIBANIZATION NAME         28         X(28)           514         523         RESULT PARSED PRIMARY NUMBER         10         X(10)           524         525         RESULT PARSED PRIMARY NAME         28         X(28)           554         557         RESULT PARSED PRIMARY NAME         28         X(28)           554         557         RESULT PARSED PRIMARY NAME         28         X(28)           554         557         RESULT PARSED DOST-DIRECTIONAL         2         X(02)           558         559         RESULT PARSED DOST-DIRECTIONAL         2         X(02)           560         563         RESULT PARSED DOST-DIRECTIONAL         2				4	
435   438	433	434		2	
439         446         QUERY PARSED SECONDARY NUMBER         08         X(08)           447         474         QUERY PARSED CITY NAME         28         X(28)           475         476         QUERY PARSED STATE         2         X(02)           477         481         QUERY PIVE DIGIT ZIP         5         X(05)           482         485         QUERY ZIP+4 ADDON         4         X(04)           486         513         RESULT PARSED VIBANIZATION NAME         28         X(28)           514         523         RESULT PARSED PRIMARY NUMBER         10         X(10)           524         525         RESULT PARSED PRIMARY NAME         28         X(28)           524         525         RESULT PARSED PRIMARY NAME         28         X(28)           554         557         RESULT PARSED SUFFIX         4         X(04)           558         559         RESULT PARSED DISTORCTIONAL         2         X(02)           560         563         RESULT PARSED SECONDARY NUMBER         08         X(08)           572         599         RESULT PARSED CITY NAME         28         X(28)           600         601         RESULT PARSED STATE         2         X(02) <t< td=""><td></td><td></td><td></td><td>4</td><td></td></t<>				4	
447         474         QUERY PARSED CITY NAME         28         X(28)           475         476         QUERY PARSED STATE         2         X(02)           477         481         QUERY FIVE DIGIT ZIP         5         X(05)           482         485         QUERY ZIP+4 ADDON         4         X(04)           486         513         RESULT PARSED URBANIZATION NAME         28         X(28)           514         523         RESULT PARSED PRIMARY NUMBER         10         X(10)           524         525         RESULT PARSED PRIMARY NAME         2         X(02)           526         553         RESULT PARSED PRIMARY NAME         28         X(28)           554         557         RESULT PARSED POST-DIRECTIONAL         2         X(02)           560         563         RESULT PARSED DOST-DIRECTIONAL         2         X(02)           560         563         RESULT PARSED SECONDARY NUMBER         08         X(08)           572         599         RESULT PARSED SECONDARY NUMBER         28         X(28)           600         601         RESULT PARSED STATE         2         X(02)           602         606         RESULT PARSED CITY NAME         28         X(28)				<u> </u>	
475         476         QUERY PARSED STATE         2         X(02)           477         481         QUERY FIVE DIGIT ZIP         5         X(05)           482         485         QUERY ZIP+4 ADDON         4         X(04)           486         613         RESULT PARSED URBANIZATION NAME         28         X(28)           514         523         RESULT PARSED PRIMARY NUMBER         10         X(10)           524         525         RESULT PARSED PRIMARY NAME         28         X(28)           526         553         RESULT PARSED PRIMARY NAME         28         X(28)           554         557         RESULT PARSED DIFFIX         4         X(04)           558         559         RESULT PARSED DIFFIX         4         X(04)           560         563         RESULT PARSED DIFFIX         4         X(04)           572         599         RESULT PARSED CHITY DAME         28         X(28)           600         601         RESULT PARSED STATE         2         X(02)           602         606         RESULT FIVE DIGIT ZIP         5         X(05)           607         610         RESULT FIVE DIGIT ZIP         5         X(05)           611		_			
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554         557         RESULT PARSED SUFFIX         4         X(04)           558         559         RESULT PARSED POST-DIRECTIONAL         2         X(02)           560         563         RESULT PARSED UNIT DESIGNATOR         4         X(04)           564         571         RESULT PARSED SECONDARY NUMBER         08         X(08)           572         599         RESULT PARSED STATE         2         X(02)           600         601         RESULT PARSED STATE         2         X(02)           602         606         RESULT EVEDIGIT ZIP         5         X(05)           607         610         RESULT ZIP+4 ADDON         4         X(04)           611         613         RESULT DBPC (including check digit)         3         X(03)           614         617         RESULT DBPC (including check digit)         3         X(03)           614         617         RESULT DROP FLAG         1         X(01)           618         618         "RESULT DROP FLAG         1         X(01)           620         625         RESULT MOVE EFFECTIVE DATE         6         X(02)           626         627         "RESULT MIDDLE NAME/Initials(returned from NCOA/Link)         1         X(02				_	
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560         563         RESULT PARSED UNIT DESIGNATOR         4         X(04)           564         571         RESULT PARSED SECONDARY NUMBER         08         X(08)           572         599         RESULT PARSED CITY NAME         28         X(28)           600         601         RESULT PARSED STATE         2         X(02)           602         606         RESULT FIVE DIGIT ZIP         5         X(04)           611         613         RESULT ZIP+4 ADDON         4         X(04)           611         613         RESULT DBPC (including check digit)         3         X(03)           614         617         RESULT DROP FLAG         1         X(04)           618         618         "RESULT DROP FLAG         1         X(01)           620         625         RESULT MOVE EFFECTIVE DATE         6         X(06)           626         627         "RESULT MIDDLE NAME/initials(returned from NCOA/Link)         2         X(02)           628         628         "RESULT GENDER (returned from NCOA/Link)         1         X(01)           629         636         "RESULT DROP RUSA         1         X(01)           629         636         "RESULT DROP RUSA         1         X(01) <td></td> <td></td> <td></td> <td></td> <td></td>					
564         571         RESULT PARSED SECONDARY NUMBER         08         X(08)           572         599         RESULT PARSED STATE         28         X(28)           600         601         RESULT PARSED STATE         2         X(02)           602         606         RESULT FIVE DIGIT ZIP         5         X(05)           607         610         RESULT DAPON         4         X(04)           611         613         RESULT DBPC (including check digit)         3         X(03)           614         617         RESULT DROP FLAG         1         X(01)           618         618         "RESULT DROP N FLAG         1         X(01)           619         619         "RESULT MOPP N FLAG         1         X(01)           620         625         RESULT MOVE EFFECTIVE DATE         6         X(06)           626         627         "RESULT MOVE EFFECTIVE DATE         6         X(06)           626         627         "RESULT MOVE EFFECTIVE DATE         6         X(06)           626         627         "RESULT MOVE EFFECTIVE DATE         6         X(06)           628         628         "RESULT MOVE EFFECTIVE DATE         2         X(02)           629					
572         599         RESULT PARSED CITY NAME         28         X(28)           600         601         RESULT PARSED STATE         2         X(02)           602         606         RESULT FIVE DIGIT ZIP         5         X(05)           607         610         RESULT ZIP+4 ADDON         4         X(04)           611         613         RESULT DBPC (including check digit)         3         X(03)           614         617         RESULT DROP FLAG         1         X(01)           618         618         "RESULT DROP FLAG         1         X(01)           619         619         "RESULT MOVE EFFECTIVE DATE         6         X(06)           620         625         RESULT MIDDLE NAME/Initials (returned from NCOA/Link)         2         X(02)           628         628         "RESULT SENDER (returned from NCOA/Link)         1         X(01)           629         636         "RESULT NCOA LINK FOOTNOTE         2         X(02)           637         638         RESULT NCOA LINK FOOTNOTE         2         X(02)           639         640         RESULT POY FOOTNOTE         2         X(02)           641         642         RESULT DOY FOOTNOTE         2         X(02)				-	
600         601         RESULT PARSED STATE         2         X(02)           602         606         RESULT FIVE DIGIT ZIP         5         X(05)           607         610         RESULT JEP4 ADDON         4         X(04)           611         613         RESULT DBPC (including check digit)         3         X(03)           614         617         RESULT DROP FLAG         1         X(04)           618         "RESULT DROP FLAG         1         X(01)           619         "RESULT DROP N FLAG         1         X(01)           620         625         RESULT MIDDLE NAME/Initials(returned from NCOA/Link)         2         X(02)           628         "RESULT GENDER (returned from NCOA/Link)         1         X(01)           629         636         "RESULT HINT BYTE (after expansion)         8         X(08)           637         638         RESULT NCOA LINK FOOTNOTE         2         X(02)           639         640         RESULT DV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(02) <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
602         606         RESULT FIVE DIGIT ZIP         5         X(05)           607         610         RESULT ZIP+4 ADDON         4         X(04)           611         613         RESULT DBPC (including check digit)         3         X(03)           614         617         RESULT DROP FLAG         1         X(04)           618         618         *RESULT DROP FLAG         1         X(01)           619         619         *RESULT MOVE EFFECTIVE DATE         6         X(06)           620         625         RESULT MOVE EFFECTIVE DATE         6         X(06)           626         627         *RESULT MOVE EFFECTIVE DATE         6         X(02)           628         628         RESULT MOVE EFFECTIVE DATE         6         X(02)           629         625         RESULT MOVE EFFECTIVE DATE         6         X(02)           628         628         RESULT MOVE EFFECTIVE DATE         6         X(02)           628         628         RESULT MOVE EFFECTIVE DATE         6         X(02)           628         628         RESULT MOVE EFFECTIVE DATE         6         X(02)           639         636         *RESULT MOVE THE (attempor MOVE AVAILIE OF THE SATE AVAILIE OF THE EMDT (attempor MOVE AVAI					
607         610         RESULT ZIP+4 ADDON         4         X(04)           611         613         RESULT DBPC (including check digit)         3         X(03)           614         617         RESULT CARRIER RTE         4         X(04)           618         618         *RESULT DROP FLAG         1         X(01)           619         619         *RESULT DROP N FLAG         1         X(01)           620         625         RESULT MOVE EFFECTIVE DATE         6         X(06)           626         627         *RESULT GENDER (returned from NCOA/Link)         2         X(02)           628         628         *RESULT GENDER (returned from NCOA/Link)         1         X(01)           629         636         *RESULT HINT BYTE (after expansion)         8         X(08)           637         638         RESULT HINT BYTE (after expansion)         8         X(08)           639         640         RESULT DOY COA LINK FOOTNOTE         2         X(02)           641         642         RESULT DOY FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from i	600			2	
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614         617         RESULT CARRIER RTE         4         X(04)           618         618         *RESULT DROP FLAG         1         X(01)           619         619         *RESULT DROP N FLAG         1         X(01)           620         625         RESULT MOVE EFFECTIVE DATE         6         X(06)           626         627         *RESULT MIDDLE NAME/Initials (returned from NCOA/Link)         2         X(02)           628         628         *RESULT GENDER (returned from NCOA/Link)         1         X(01)           629         636         *RESULT HINT BYTE (after expansion)         8         X(08)           637         638         RESULT NCOA LINK FOOTNOTE         2         X(02)           639         640         RESULT ZIP+4 FOOTNOTE         2         X(02)           641         642         RESULT DPV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         15         X(15)           750         754         SUFF	607		RESULT ZIP+4 ADDON	4	
618         618         *RESULT DROP FLAG         1         X(01)           619         619         *RESULT DROP N FLAG         1         X(01)           620         625         RESULT MOVE EFFECTIVE DATE         6         X(06)           626         627         *RESULT MIDDLE NAME/Initials(returned from NCOA/Link)         2         X(02)           628         628         *RESULT GENDER (returned from NCOA/Link)         1         X(01)           629         636         *RESULT HINT BYTE (after expansion)         8         X(08)           637         638         RESULT NCOA LINK FOOTNOTE         2         X(02)           639         640         RESULT DPV FOOTNOTE         2         X(02)           641         642         RESULT DPV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         <	611	613	RESULT DBPC (including check digit)	3	X(03)
619         619         *RESULT DROP N FLAG         1         X(01)           620         625         RESULT MOVE EFFECTIVE DATE         6         X(06)           626         627         *RESULT MIDDLE NAME/Initials(returned from NCOA/Link)         2         X(02)           628         628         *RESULT GENDER (returned from NCOA/Link)         1         X(01)           629         636         *RESULT HINT BYTE (after expansion)         8         X(08)           637         638         RESULT NCOA LINK FOOTNOTE         2         X(02)           639         640         RESULT ZIP+4 FOOTNOTE         2         X(02)           641         642         RESULT DPV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE 48 BYTE OBJECT         16         X(15)           730         749         LAST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           755         7	614	617	RESULT CARRIER RTE	4	X(04)
620         625         RESULT MOVE EFFECTIVE DATE         6         X(06)           626         627         *RESULT MIDDLE NAME/Initials(returned from NCOA/Link)         2         X(02)           628         628         *RESULT GENDER (returned from NCOA/Link)         1         X(01)           629         636         *RESULT HINT BYTE (after expansion)         8         X(08)           637         638         RESULT NCOA LINK FOOTNOTE         2         X(02)           639         640         RESULT ZIP+4 FOOTNOTE         2         X(02)           641         642         RESULT DPV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         15         X(15)           730         749         LAST NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)	618	618	*RESULT DROP FLAG	1	X(01)
620         625         RESULT MOVE EFFECTIVE DATE         6         X(06)           626         627         *RESULT MIDDLE NAME/Initials(returned from NCOA/Link)         2         X(02)           628         628         *RESULT GENDER (returned from NCOA/Link)         1         X(01)           629         636         *RESULT HINT BYTE (after expansion)         8         X(08)           637         638         RESULT NCOA LINK FOOTNOTE         2         X(02)           639         640         RESULT ZIP+4 FOOTNOTE         2         X(02)           641         642         RESULT DPV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)	619	619	*RESULT DROP N FLAG	1	X(01)
626         627         *RESULT MIDDLE NAME/Initials(returned from NCOA/Link)         2         X(02)           628         628         *RESULT GENDER (returned from NCOA/Link)         1         X(01)           629         636         *RESULT HINT BYTE (after expansion)         8         X(08)           637         638         RESULT NCOA LINK FOOTNOTE         2         X(02)           639         640         RESULT ZIP+4 FOOTNOTE         2         X(02)           641         642         RESULT DV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17			RESULT MOVE EFFECTIVE DATE	6	
628         628         *RESULT GENDER (returned from NCOA/Link)         1         X(01)           629         636         *RESULT HINT BYTE (after expansion)         8         X(08)           637         638         RESULT NCOA LINK FOOTNOTE         2         X(02)           639         640         RESULT ZIP+4 FOOTNOTE         2         X(02)           641         642         RESULT DPV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         15         X(15)           730         749         LAST NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         5         X(05)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)	626	627	*RESULT MIDDLE NAME/Initials(returned from NCOA/Link)	2	
629         636         *RESULT HINT BYTE (after expansion)         8         X(08)           637         638         RESULT NCOA LINK FOOTNOTE         2         X(02)           639         640         RESULT ZIP+4 FOOTNOTE         2         X(02)           641         642         RESULT DPV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         15         X(15)           730         749         LAST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           795         810         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(16)           811         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)				1	
637         638         RESULT NCOA LINK FOOTNOTE         2         X(02)           639         640         RESULT ZIP+4 FOOTNOTE         2         X(02)           641         642         RESULT DPV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         15         X(15)           730         749         LAST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         <	629			8	
639         640         RESULT ZIP+4 FOOTNOTE         2         X(02)           641         642         RESULT DPV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         15         X(15)           730         749         LAST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           837         997         FILLER         161         X(161)					X(02)
641         642         RESULT DPV FOOTNOTE         2         X(02)           643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         15         X(15)           730         749         LAST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X					` '
643         658         HEX VALUE OF THE EMDP (from input address)         16         X(16)           659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         15         X(15)           730         749         LAST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           829         836         OPTIONAL – INTERMEDIATE FOOTNOTES         8         X(08)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1					
659         698         HEX VALUE OF THE SHA OF EMPD (from input address)         40         X(40)           699         714         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         15         X(15)           730         749         LAST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           829         836         OPTIONAL – INTERMEDIATE FOOTNOTES         8         X(08)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X(01)					
699         714         HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT         16         X(16)           715         729         FIRST NAME OF THE 48 BYTE OBJECT         15         X(15)           730         749         LAST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           829         836         OPTIONAL – INTERMEDIATE FOOTNOTES         8         X(08)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X(01)					
715         729         FIRST NAME OF THE 48 BYTE OBJECT         15         X(15)           730         749         LAST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           829         836         OPTIONAL – INTERMEDIATE FOOTNOTES         8         X(08)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X(01)					
730         749         LAST NAME OF THE 48 BYTE OBJECT         20         X(20)           750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           829         836         OPTIONAL – INTERMEDIATE FOOTNOTES         8         X(08)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X(01)					. ,
750         754         SUFFIX NAME OF THE 48 BYTE OBJECT         5         X(05)           755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           829         836         OPTIONAL – INTERMEDIATE FOOTNOTES         8         X(08)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X(01)					
755         794         HEX VALUE OF THE SHA OF 48 BYTE OBJECT         40         X(40)           795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           829         836         OPTIONAL – INTERMEDIATE FOOTNOTES         8         X(08)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X(01)					
795         810         HEX VALUE OF THE DATA RETRIEVED (before reorder)         16         X(16)           811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           829         836         OPTIONAL – INTERMEDIATE FOOTNOTES         8         X(08)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X(01)					
811         827         DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE         17         X(17)           828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           829         836         OPTIONAL – INTERMEDIATE FOOTNOTES         8         X(08)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X(01)					
828         828         RESULT MOVE TYPE (Family, Individual, Business)(F,I,B)         1         X(01)           829         836         OPTIONAL – INTERMEDIATE FOOTNOTES         8         X(08)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X(01)					
829         836         OPTIONAL – INTERMEDIATÉ FOOTNOTES         8         X(08)           837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X(01)					
837         997         FILLER         161         X(161)           998         998         RECORD TYPE (Header/Detail) (H,D)         1         X(01)					
998 998 RECORD TYPE (Header/Detail) (H,D) 1 X(01)					
999   1000   CARRIAGE RETURN LINE FEED   2   X(02)				-	. ,
	999	1000	CARRIAGE RETURN LINE FEED	2	X(02)

<sup>\*</sup>The following fields of returned data used for analysis must not be returned to the customer: result drop flag, result drop n flag, result middle name, result gender and result hint byte.

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# Exhibit D Report File Layouts

## NCOA EINE MONTHLY CUSTOMER SERVICE LOG END USER MAILER Header Record

		Header Record		
		(page 1 of 3)		
RECORD	POSITION			
FROM	ТО	FIELD NAME and DESCRIPTION	LENGTH	COBOL
	1.4	CHOTOMEDID	l 4	1 \//4\
1	4	CUSTOMER ID Alphanumeric. Licensee ID (USPS assigned)	4	X(4)
5	18	NUMBER OF RECORDS	14	9(14)
3	10	Total number of records in the Customer Service Log excluding Header	17	3(14)
		Record		
19	70	Filler	52	X(52)
		The Header Record must contain file totals for all fields in the subsequent Detail Record(s). All field positions in the Header Record correspond to field positions in the Detail Record(s).		
		Fields listed as "Optional – Filler" in the Detail Record are also optional in the Header Record. However, if data is provided in these fields in the Detail Record(s), file totals MUST appear in the Header Record for the corresponding fields.		
7.1		Processing Statistics Summary	4.4	0(11)
71	81	TOTAL NUMBER OF RECORDS PROCESSED	11	9(11)
82	92	TOTAL NUMBER OF NCOA <sup>LINK</sup> QUERIES PERFORMED TOTAL NUMBER OF RECORDS MATCHED	11	9(11)
93	103	TOTAL NUMBER OF RECORDS MATCHED  TOTAL NUMBER OF MATCHES REJECTED	11	9(11)
104 115	114 125	TOTAL NUMBER OF MATCHES REJECTED  TOTAL NUMBER OF RECORDS ZIP+4 CODED  OPT – FILLER	11 11	9(11)
126	136	TOTAL NUMBER OF RECORDS DPV CONFIRMED OPT – FILLER	11	9(11)
120	130	TOTAL NOWIDER OF RECORDS DEV CONFIRMED OF I - FILLER	11	9(11)
		Product Information		
137	286	Filler	150	X(150)
				, ,
		ZIP+4 Match Statistics		
287	297	Total matched to PO Box record OPTIONAL – FILLER	11	9(11)
298	308	Total matched to Highway Contract record with Box number	11	9(11)
200	240	OPTIONAL - FILLER	4.4	0(44)
309	319	Total matched to Rural Route default OPTIONAL - FILLER	11	9(11)
320 331	330 341	Total matched to Firm record OPTIONAL – FILLER Total matched to General Delivery OPTIONAL – FILLER	11 11	9(11) 9(11)
342	352	Total matched to Building/Highrise default OPTIONAL - FILLER  OPTIONAL - FILLER	11	9(11)
353	363	Total matched to Military ZIP OPTIONAL – FILLER  OPTIONAL – FILLER	11	9(11)
364	374	Total matched to Non-deliverable OPTIONAL – FILLER	11	9(11)
375	385	Total matched to Rural Route with Box number OPT – FILLER	11	9(11)
386	396	Total matched to Street record OPTIONAL – FILLER	11	9(11)
397	407	Total matched to Highway Contract default OPTIONAL – FILLER	11	9(11)
408	418	Total matched to Building/Highrise with secondary OPT – FILLER	11	9(11)
419	429	Total matched to other OPTIONAL – FILLER	11	9(11)
430	440	Total matched to records with positive LACS flag OPT – FILLER	11	9(11)
441	451	EWS – No Match Count OPTIONAL – FILLER	11	9(11)
		Footnote Information: Number of responses containing each footnote code:		
		New Address Provided by NCOALink		
450	100			0(4.1)
452	462	A – Match	11	9(11)
463	473	91 – Match with Secondary Number Dropped on COA (Old Side)	11	9(11)
474	484	92 – Match with Secondary Number Dropped on Input	11	9(11)

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#### NCOALINK MONTHLY CUSTOMER SERVICE LOG END USER MAILER Header Record

	DOCUTION.	(page 2 of 3)	ı	1
RECORD FROM	POSITION TO	FIELD NAME and DESCRIPTION	LENGTH	COBOL
1110111	10	TILLED WANTE UND DESCRIPTION	LLINOIII	COBOL
		From NCOA <sup>Link</sup> File Build		
485	495	01 – Match – Foreign Move	11	9(11)
496	506	02 – Match – Moved Left No Address	11	9(11)
507	517	03 – Match – PO Box Closed	11	9(11)
518	528	04 - No Match - Family move from Street Address w/Secondary	11	9(11)
529	539	05 – Match – New 11 digit DPBC is ambiguous	11	9(11)
540	550	06 - No Match - Middle Name Related	11	9(11)
551	561	07 – No Match – Gender Related	11	9(11)
562	572	08 – No Match – Conflicting Instructions	11	9(11)
573	583	09 – No Match – Family move from Highrise default	11	9(11)
584	594	10 – No Match – Family move from Rural/HC Route default	11	9(11)
595	605	11 – No Match – Individual move – Insufficient name data	11	9(11)
606	616	18 – No Match – Family move from General Delivery	11	9(11)
617	627	19 – Match – New Address not ZIP+4 codeable	11	9(11)
628	638	20 – No Match – Multiple Response – Conflicting Directions	11	9(11)
020	000	20 No Matori Manapie Response Communing Directions		3(11)
		From NCOA <sup>Link</sup> File Run		
639	649	12 – No Match – Middle Name test failed	11	9(11)
650	660	13 – No Match – Gender test failed	11	9(11)
661	671	14 – Match – New Address would not convert	11	9(11)
672	682	15 – No Match – Individual Name insufficient on input to match	11	9(11)
683	693	16 – No Match – Secondary Number discrepancy	11	9(11)
694	704	17 – No Match – Secondary Number discrepancy	11	9(11)
034	704	17 - No Match - Different Hist Name	11	3(11)
		From "Daily Delete" Process		
705	715	66 – No Match – Input Address appears in "Daily Delete"	11	9(11)
	7.10	suppression file OPTIONAL – FILLER		0(11)
		From DPV Processing of Input Addresses		
716	726	AA – ZIP+4 Match OPTIONAL – FILLER	11	9(11)
727	737	A1 – ZIP+4 No Match OPTIONAL – FILLER	11	9(11)
738	748	M1 – Primary Number missing OPTIONAL – FILLER	11	9(11)
749	759	M3 – Primary Number invalid OPTIONAL – FILLER	11	9(11)
760	770	P1 – Missing PO, RR or HC Box number OPTIONAL – FILLER	11	9(11)
771	781	P3 – Invalid PO, RR or HC Box number OPTIONAL – FILLER	11	9(11)
782	792	BB – DPV matched (all components) OPTIONAL – FILLER	11	9(11)
793	803	RR – DPV Matched to CMRA OPTIONAL – FILLER	11	9(11)
804	814	CC – Primary Number Match – Secondary present but invalid	11	9(11)
		OPTIONAL – FILLER		
815	825	N1 – Primary Number Match – Secondary missing	11	9(11)
		OPTIONAL – FILLER		
826	836	R1 – DPV Matched to CMRA– PMB number not present	11	9(11)
		OPTIONAL – FILLER		
		Move Activity Summary		
007	0.47	Age based on month and year of process date.	44	0(4.1)
837	847	ADDRESSES MATCHED MONTH 0	11	9(11)
848	858	ADDRESSES MATCHED MONTH 1	11	9(11)
859	869	ADDRESSES MATCHED MONTH 2	11	9(11)
870	880	ADDRESSES MATCHED MONTH 3	11	9(11)
881	891	ADDRESSES MATCHED MONTH 4	11	9(11)
892	902	ADDRESSES MATCHED MONTH 5	11	9(11)
903	913	ADDRESSES MATCHED MONTH 6	11	9(11)

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#### NCOA<sup>LINK</sup>MONTHLY CUSTOMER SERVICE LOG END USER MAILER Header Record

		(page 3 of 3)		
RECORD	POSITION	FIELD NAME I DECORIDATION	LENGTH	00001
FROM	ТО	FIELD NAME and DESCRIPTION	LENGTH	COBOL
914	924	ADDRESSES MATCHED MONTH 7	11	9(11)
925	935	ADDRESSES MATCHED MONTH 8	11	9(11)
936	946	ADDRESSES MATCHED MONTH 9	11	9(11)
947	957	ADDRESSES MATCHED MONTH 10	11	9(11)
958	968	ADDRESSES MATCHED MONTH 11	11	9(11)
969	979	ADDRESSES MATCHED MONTH 12	11	9(11)
980	990	ADDRESSES MATCHED MONTH 13	11	9(11)
991	1001	ADDRESSES MATCHED MONTH 14	11	9(11)
1002	1012	ADDRESSES MATCHED MONTH 15	11	9(11)
1013	1012	ADDRESSES MATCHED MONTH 16	11	9(11)
1024	1023	ADDRESSES MATCHED MONTH 17	11	9(11)
1035	1034	ADDRESSES MATCHED MONTH 17 ADDRESSES MATCHED MONTH 18	11	9(11)
1046	1045	ADDRESSES MATCHED MONTH 19	11	9(11)
1057	1067	ADDRESSES MATCHED MONTH 19 ADDRESSES MATCHED MONTH 20	11	
1068	1007	ADDRESSES MATCHED MONTH 21	11	9(11)
1068	1078	ADDRESSES MATCHED MONTH 22	11	\ /
				9(11)
1090	1100	ADDRESSES MATCHED MONTH 23	11	9(11)
1101	1111	ADDRESSES MATCHED MONTH 24	11	9(11)
1112	1122	ADDRESSES MATCHED MONTH 25	11	9(11)
1123	1133	ADDRESSES MATCHED MONTH 26	11	9(11)
1134	1144	ADDRESSES MATCHED MONTH 27	11	9(11)
1145	1155	ADDRESSES MATCHED MONTH 28	11	9(11)
1156	1166	ADDRESSES MATCHED MONTH 29	11	9(11)
1167	1177	ADDRESSES MATCHED MONTH 30	11	9(11)
1178	1188	ADDRESSES MATCHED MONTH 31	11	9(11)
1189	1199	ADDRESSES MATCHED MONTH 32	11	9(11)
1200	1210	ADDRESSES MATCHED MONTH 33	11	9(11)
1211	1221	ADDRESSES MATCHED MONTH 34	11	9(11)
1222	1232	ADDRESSES MATCHED MONTH 35	11	9(11)
1233	1243	ADDRESSES MATCHED MONTH 36	11	9(11)
1244	1254	ADDRESSES MATCHED MONTH 37	11	9(11)
1255	1265	ADDRESSES MATCHED MONTH 38	11	9(11)
1266	1276	ADDRESSES MATCHED MONTH 39	11	9(11)
1277	1287	ADDRESSES MATCHED MONTH 40	11	9(11)
1288	1298	ADDRESSES MATCHED MONTH 41	11	9(11)
1299	1309	ADDRESSES MATCHED MONTH 42	11	9(11)
1310	1320	ADDRESSES MATCHED MONTH 43	11	9(11)
1321	1331	ADDRESSES MATCHED MONTH 44	11	9(11)
1332	1342	ADDRESSES MATCHED MONTH 45	11	9(11)
1343	1353	ADDRESSES MATCHED MONTH 46	11	9(11)
1354	1364	ADDRESSES MATCHED MONTH 47	11	9(11)
1365	1375	ADDRESSES MATCHED MONTH 48	11	9(11)
1376	1799	FILLER	424	X(424)
1800	1800	DECORD TYPE	1	V(1)
1000	1000	RECORD TYPE H = Header / D = Detail	1	X(1)
		CR/LF		
		Carriage Return/Line Feed required at end of each record.		

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NCOA <sup>Link</sup> MONTHLY CUSTOMER SERVICE LOG END USER MAILER Detail Record				
RECORD FROM	POSITION TO	(page 1 of 6)  FIELD NAME and DESCRIPTION	LENGTH	COBOL
1	4	LICENSEE ID Platform ID assigned by USPS.	4	X(4)
5	10	NAICS/SIC North American Industry Classification System / Standard Industry Code	6	9(6)
11	12	PROCESSING FREQUENCY Number of times per year list processed. If update frequency not established for a particular list, fill with "99".	2	9(2)
13	18	FILLER	6	X(6)
19	28	PROCESSING CATEGORY Set values to identify the type of processing performed. EMP TRAIN, INT DB TST, MKTG TEST, NORMAL, STAGE I, STAGE II, SYS TEST	10	X(10)
29	33	FILLER	5	X(5)
34	34	MATCHING LOGIC APPLIED S = Standard (Business, Individual and Family matches allowed) I = Individual only B = Business only C = Individual and Business only	1	X(1)
35	35	FILLER	1	X(1)
36	37	NUMBER OF MONTHS REQUESTED  By request of list owner, number of months for which COA data accepted	2	9(2)
38	38	CLASS OF MAIL Alphanumeric. Class of mail to be used for mailings produced from customer mailing list.  A = First-Class only B = Periodicals only C = Standard Mail only D = Package Services only E = First-Class & Periodicals F = First-Class & Standard Mail G = First-Class & Standard Mail I = Periodicals & Standard Mail I = Periodicals & Package Services J = Standard Mail & Package Services K = First-Class, Periodicals & Standard Mail L = First-Class, Periodicals & Package Services M = First-Class, Standard Mail & Package Services N = Periodicals, Standard Mail & Package Services O = First-Class, Periodical, Standard Mail, Package Services	1	X(1)
		Processing Date Information		
39 47	46 54	FILLER DATE NCOA <sup>Link</sup> PROCESSING BEGAN Numeric. Format CCYYMMDD.	8	9(8)
55	62	DATE NCOA <sup>Link</sup> PROCESSING COMPLETED Numeric. Format CCYYMMDD.	8	9(8)
63	70	FILLER	8	9(8)

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#### NCOA<sup>LINK</sup>MONTHLY CUSTOMER SERVICE LOG END USER MAILER Detail Record

RECORD	POSITION	(page 2 of 6)		
FROM	то	FIELD NAME and DESCRIPTION	LENGTH	COBOL
		Processing Statistics Summary		
71	81	TOTAL NUMBER OF RECORDS PROCESSED	11	9(11)
		Total number of records presented on the original input list.		, ,
82	92	TOTAL NUMBER OF NCOALINK QUERIES PERFORMED	11	9(11)
		Total number of all queries made into NCOA <sup>Link</sup> including all variation	ns	
		of name and address attempted for each input record. (ie: nickname		
		attempts; dropped secondary attempts)		
93	103	TOTAL NUMBER OF RECORDS MATCHED	11	9(11)
		Results returned indicate match: Return codes A, 91, 92, 01, 02, 03,		
		05, 14, 19		2(11)
104	114	TOTAL NUMBER OF MATCHES REJECTED	11	9(11)
		Results discarded based on Move Effective Date: Return code 00		
115	405	generated due to age of COA  TOTAL NUMBER OF RECORDS ZIP+4 CODED  OPT – FILLI	ED 44	0/44\
115 126	125 136	TOTAL NUMBER OF RECORDS ZIP+4 CODED OPT – FILLI TOTAL NUMBER OF RECORDS DPV CONFIRMED OPT – FILLI		9(11)
120	136	TOTAL NUMBER OF RECORDS DPV CONFIRMED OPT - FILL	EK II	9(11)
		ZIP+4 Product Information		
137	166	ZIP+4 Software Name OPTIONAL – FILLI	<b>ER</b> 30	X(30)
167	178	ZIP+4 Software Version OPTIONAL - FILLI		X(12)
179	186	ZIP+4 Directory (Data) Release Date  OPTIONAL - FILLI OPTIONAL - FILLI		9(8)
179	100	Numeric. Format CCYYMMDD.	EK O	9(0)
		Numeric. Format COT TWINDD.	+	
		NCOA <sup>Link</sup> Product Information		
187	216	NCOA <sup>Link</sup> Software Name	30	X(30)
217	228	NCOA <sup>Link</sup> Software Version	12	X(12)
229	236	NCOA <sup>Link</sup> Data Release Date	8	9(8)
220	200	Numeric. Format CCYYMMDD.	ľ	3(0)
		Trainered Female 66 Franks 5		
		DPV Product Information		
237	266	DPV Software Name OPTIONAL - FILLE	<b>ER</b> 30	X(30)
267	278	DPV Software Version OPTIONAL – FILLE		X(12)
279	286	DPV Data Release Date OPTIONAL – FILLE	<b>ER</b> 8	9(8)
		Numeric. Format CCYYMMDD.		-(-)
		ZIP+4 Match Statistics		
287	297	Total matched to PO Box record OPTIONAL – FILLS	ER 11	9(11)
298	308	Total matched to Highway Contract record with Box number	11	9(11)
		OPTIONAL – FILLE	₽	
309	319	Total matched to Rural Route default OPTIONAL – FILLS		9(11)
320	330	Total matched to Firm record OPTIONAL – FILLE		9(11)
331	341	Total matched to General Delivery OPTIONAL – FILLS		9(11)
342	352	Total matched to Building/Highrise default OPTIONAL - FILLE		9(11)
353	363	Total matched to Military ZIP OPTIONAL – FILLE		9(11)
364	374	Total matched to Non-deliverable OPTIONAL – FILLE		9(11)
375	385	Total matched to Rural Route with Box number OPT – FILLI		9(11)
386	396	Total matched to Street record OPTIONAL – FILLI		9(11)
397	407	Total matched to Highway Contract default OPTIONAL - FILLE		9(11)
408	418	Total matched to Building/Highrise with secondary OPT – FILLI		9(11)
	429	Total matched to other OPTIONAL – FILLS	ER   11	9(11)
419				
419 430 441	440 451	Total matched to records with positive LACS flag OPT – FILLI EWS – No Match Count OPTIONAL – FILLE	ER 11	9(11)

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#### NCOA<sup>LINK</sup>MONTHLY CUSTOMER SERVICE LOG END USER MAILER Detail Record

RECORD	POSITION			
FROM	ТО	FIELD NAME and DESCRIPTION	LENGTH	COBOL
		Footnote Information: Number of responses containing each footnote		
		code:		
		New Address Provided by NCOA <sup>Link</sup>		
452	462	A – Match	11	9(11)
463	473	91 – Match with Secondary Number Dropped on COA (Old Side)	11	9(11)
474	484	92 – Match with Secondary Number Dropped on Input	11	9(11)
		From NCOA <sup>Link</sup> File Build		
485	495	01 – Match – Foreign Move	11	9(11)
496	506	02 – Match – Moved Left No Address	11	9(11)
507	517	03 – Match – PO Box Closed	11	9(11)
518	528	04 – No Match – Family move from Street Address w/Secondary	11	9(11)
529	539	05 – Match – New 11 digit DPBC is ambiguous	11	9(11)
540	550	06 – No Match – Middle Name Related	11	9(11)
551	561	07 – No Match – Gender Related	11	9(11)
562	572	08 – No Match – Conflicting Instructions	11	9(11)
573	583	09 – No Match – Family move from Highrise default	11	9(11)
584	594	10 – No Match – Family move from Rural/HC Route default	11	9(11)
595	605	11 – No Match – Individual move – Insufficient name data	11	9(11)
606	616	18 – No Match – Family move from General Delivery	11	9(11)
617	627	19 – Match – New Address not ZIP+4 codeable	11	9(11)
628	638	20 – No Match – Multiple Response – Conflicting Directions	11	9(11)
				3(11)
000	0.40	From NCOALINK File Run	4.4	0(11)
639	649	12 – No Match – Middle Name test failed	11	9(11)
650	660	13 – No Match – Gender test failed	11	9(11)
661	671	14 – Match – New Address would not convert	11	9(11)
672	682	15 – No Match – Individual Name insufficient on input to match	11	9(11)
683	693	16 – No Match – Secondary Number discrepancy	11	9(11)
694	704	17 – No Match – Different First Name	11	9(11)
		From "Daily Delete" Process		
705	715	66 - No Match - Input Address appears in "Daily Delete"	11	9(11)
		suppression file OPTIONAL – FILLER		
		From DPV Processing of Input Addresses		
716	726	AA – ZIP+4 Match OPTIONAL – FILLER	11	9(11)
727	737	A1 – ZIP+4 No Match OPTIONAL – FILLER	11	9(11)
738	748	M1 – Primary Number missing OPTIONAL – FILLER	11	9(11)
749	759	M3 – Primary Number invalid OPTIONAL – FILLER	11	9(11)
760	770	P1 – Missing PO, RR or HC Box number OPTIONAL – FILLER	11	9(11)
771	781	P3 – Invalid PO, RR or HC Box number OPTIONAL – FILLER	11	9(11)
782	792	BB – DPV matched (all components) OPTIONAL – FILLER	11	9(11)
793	803	RR – DPV Matched to CMRA OPTIONAL – FILLER	11	9(11)
804	814	CC – Primary Number Match – Secondary present but invalid	11	9(11)
		OPTIONAL – FILLER		
815	825	N1 – Primary Number Match – Secondary missing OPTIONAL – FILLER	11	9(11)
826	836	R1 – DPV Matched to CMRA– PMB number not present	11	9(11)
-	1	OPTIONAL – FILLER		- ( )

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#### NCOALINK MONTHLY CUSTOMER SERVICE LOG **END USER MAILER Detail Record** (page 4 of 6) RECORD POSITION **FROM FIELD NAME and DESCRIPTION** LENGTH **COBOL** TO Move Activity Summary Age based on month and year of process date. ADDRESSES MATCHED MONTH 0 837 847 11 9(11) Total number of matches made with Move Effective Date (MED) corresponding to the process date. ADDRESSES MATCHED MONTH 1 848 858 11 9(11) Total number of matches made with MED 1 month prior to process date. 859 869 ADDRESSES MATCHED MONTH 2 11 9(11) Total number of matches made with MED 2 months prior to process date. 870 ADDRESSES MATCHED MONTH 3 880 11 9(11) Total number of matches made with MED 3 months prior to process date. ADDRESSES MATCHED MONTH 4 881 891 11 9(11) Total number of matches made with MED 4 months prior to process date. ADDRESSES MATCHED MONTH 5 892 902 11 9(11) Total number of matches made with MED 5 months prior to process date. 913 ADDRESSES MATCHED MONTH 6 903 11 9(11) Total number of matches made with MED 6 months prior to process date. ADDRESSES MATCHED MONTH 7 914 924 11 9(11) Total number of matches made with MED 7 months prior to process date. 935 ADDRESSES MATCHED MONTH 8 925 11 9(11) Total number of matches made with MED 8 months prior to process date. 936 946 ADDRESSES MATCHED MONTH 9 11 9(11) Total number of matches made with MED 9 months prior to process date. ADDRESSES MATCHED MONTH 10 947 957 11 9(11) Total number of matches made with MED 10 months prior to process date 968 ADDRESSES MATCHED MONTH 11 958 11 9(11) Total number of matches made with MED 11 months prior to process date. ADDRESSES MATCHED MONTH 12 969 979 11 9(11) Total number of matches made with MED 12 months prior to process date. ADDRESSES MATCHED MONTH 13 980 990 11 9(11) Total number of matches made with MED 13 months prior to process date. 1001 ADDRESSES MATCHED MONTH 14 991 11 9(11) Total number of matches made with MED 14 months prior to process date. ADDRESSES MATCHED MONTH 15 1002 1012 11 9(11) Total number of matches made with MED 15 months prior to process date. ADDRESSES MATCHED MONTH 16 1013 1023 11 9(11) Total number of matches made with MED 16 months prior to process date. 1024 1034 ADDRESSES MATCHED MONTH 17 11 9(11) Total number of matches made with MED 17 months prior to process date. 1035 1045 ADDRESSES MATCHED MONTH 18 11 9(11) Total number of matches made with MED 18 months prior to process date. ADDRESSES MATCHED MONTH 19 1046 1056 11 9(11) Total number of matches made with MED 19 months prior to process date. 1057 1067 ADDRESSES MATCHED MONTH 20 11 9(11) Total number of matches made with MED 20 months prior to process date. 1068 1078 ADDRESSES MATCHED MONTH 21 11 9(11) Total number of matches made with MED 21 months prior to process date. ADDRESSES MATCHED MONTH 22 1079 1089 11 9(11) Total number of matches made with MED 22 months prior to process date. ADDRESSES MATCHED MONTH 23 1090 1100 11 9(11) Total number of matches made with MED 23 months prior to process date.

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#### NCOALINK MONTHLY CUSTOMER SERVICE LOG END USER MAILER Detail Record

Detail Record (page 5 of 6)					
RECORD FROM	POSITION TO	FIELD NAME and DESCRIPTION	LENGTH	COBOL	
1101	1111	ADDRESSES MATCHED MONTH 24 Total number of matches made with MED 24 months prior to process date.	11	9(11)	
1112	1122	ADDRESSES MATCHED MONTH 25 Total number of matches made with MED 25 months prior to process date.	11	9(11)	
1123	1133	ADDRESSES MATCHED MONTH 26 Total number of matches made with MED 26 months prior to process date.	11	9(11)	
1134	1144	ADDRESSES MATCHED MONTH 27 Total number of matches made with MED 27 months prior to process date.	11	9(11)	
1145	1155	ADDRESSES MATCHED MONTH 28 Total number of matches made with MED 28 months prior to process date.	11	9(11)	
1156	1166	ADDRESSES MATCHED MONTH 29 Total number of matches made with MED 29 months prior to process date.	11	9(11)	
1167	1177	ADDRESSES MATCHED MONTH 30 Total number of matches made with MED 30 months prior to process date.	11	9(11)	
1178	1188	ADDRESSES MATCHED MONTH 31 Total number of matches made with MED 31 months prior to process date.	11	9(11)	
1189	1199	ADDRESSES MATCHED MONTH 32 Total number of matches made with MED 32 months prior to process date.	11	9(11)	
1200	1210	ADDRESSES MATCHED MONTH 33 Total number of matches made with MED 33 months prior to process date.	11	9(11)	
1211	1221	ADDRESSES MATCHED MONTH 34 Total number of matches made with MED 34 months prior to process date.	11	9(11)	
1222	1232	ADDRESSES MATCHED MONTH 35 Total number of matches made with MED 35 months prior to process date.	11	9(11)	
1233	1243	ADDRESSES MATCHED MONTH 36 Total number of matches made with MED 36 months prior to process date.	11	9(11)	
1244	1254	ADDRESSES MATCHED MONTH 37 Total number of matches made with MED 37 months prior to process date.	11	9(11)	
1255	1265	ADDRESSES MATCHED MONTH 38  Total number of matches made with MED 38 months prior to process date.	11	9(11)	
1266	1276	ADDRESSES MATCHED MONTH 39 Total number of matches made with MED 39 months prior to process date.	11	9(11)	
1277	1287	ADDRESSES MATCHED MONTH 40 Total number of matches made with MED 40 months prior to process date.	11	9(11)	
1288	1298	ADDRESSES MATCHED MONTH 41 Total number of matches made with MED 41 months prior to process date.	11	9(11)	
1299	1309	ADDRESSES MATCHED MONTH 42 Total number of matches made with MED 42 months prior to process date.	11	9(11)	
1310	1320	ADDRESSES MATCHED MONTH 43  Total number of matches made with MED 43 months prior to process date.	11	9(11)	
1321	1331	ADDRESSES MATCHED MONTH 44  Total number of matches made with MED 44 months prior to process date.	11	9(11)	
1332	1342	ADDRESSES MATCHED MONTH 45 Total number of matches made with MED 45 months prior to process date.	11	9(11)	
1343	1353	ADDRESSES MATCHED MONTH 46 Total number of matches made with MED 46 months prior to process date.	11	9(11)	
1354	1364	ADDRESSES MATCHED MONTH 47 Total number of matches made with MED 47 months prior to process date.	11	9(11)	
1365	1375	ADDRESSES MATCHED MONTH 48 Total number of matches made with MED 48 months or more prior to process date.	11	9(11)	
				<u> </u>	

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#### NCOA LINK MONTHLY CUSTOMER SERVICE LOG **END USER MAILER Detail Record** (page 6 of 6) RECORD POSITION FROM **FIELD NAME and DESCRIPTION LENGTH COBOL** TO 1376 1422 FILLER 47 X(47) List Identification 1423 1452 MAILING LIST NAME 30 X(30) Name of mailing list processed. NOTE: If master house list and/or list owner's only mailing list, company name is sufficient. 1453 2199 FILLER 747 X(747) 2200 2200 RECORD TYPE 1 X(1) H = Header / D = Detail CR/LF Carriage Return/Line Feed required at end of each record.

Note: All numeric fields are right justified, zero filled.

All alphanumeric fields are left justified, spaced filled.

Note: This file shall be submitted in standard ASCII text format and electronically transmitted to the NCSC. The file shall be

named using "C," the 4-character code assigned by the NCSC, the 1-character code for the month and the year with

an extension of DAT. (e.g. CNAAAC02.DAT)

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